Int'l Appl. No.

PCT/JP2003/007961

Int'l Filing Date

June 24, 2003

AMENDMENTS TO THE CLAIMS

Please amend the Claims as follows. Insertions are shown <u>underlined</u> while deletions are struck through.

1 (original): A conductive resin film comprising a conductive substrate layer and a low-resistance layer with a volume resistance of 0.1 to 1.0 Ω cm in a thickness direction as at least one of its outermost layer.

2 (original): The conductive resin film as claimed in Claim 1, wherein a volume resistance of the low-resistance layer in a thickness direction is 1/5 or less of a volume resistance of the substrate layer in a thickness direction.

3 (currently amended): The conductive resin film as claimed in Claim 1–or 2, wherein the low-resistance layer is a layer in which the thermoplastic resin comprises a fine carbon fiber with a fiber diameter of 0.003 to 0.5 μ m and a fiber length of 0.1 to 100 μ m as a conductive agent.

4 (currently amended): The conductive resin film as claimed in any of Claims 1-to 3, wherein a thickness of the low-resistance layer is 1 to 50 μ m.

5 (currently amended): The conductive resin film as claimed in any of Claims 1-to 4, wherein the substrate layer comprises a conductive agent selected from the group consisting of graphite powder, exfoliated graphite, carbon black, carbon fiber, carbon nanofiber, carbon nanotube, a metal carbide, a metal nitride, a metal oxide, metal fiber and metal powder.

6 (currently amended): A process for manufacturing a conductive resin film having a low-resistance layer as at least one of its outermost layers as claimed in Claim 1, comprising the steps of applying a liquid composition of a fine carbon fiber and a thermoplastic resin in a solvent to a flat surface of a support, followed by drying or curing to form a coating film; placing the coating film over at least one side of a conductive substrate layer; and performing a lamination.

7 (currently amended): A conductive resin film as claimed in any of-Claims 1-to-5 used as a collector for an electric double layer capacitor.

8 (original): A collector for an electric double layer capacitor comprising the conductive resin film as claimed in Claim 7.

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9 (original): A conductive resin film comprising a thermoplastic resin containing a fine carbon fiber having a fiber diameter of 0.001 to 0.5 μ m and a fiber length of 0.1 to 100 μ m, wherein when a mixing volume ratio of the thermoplastic resin to the fine carbon fiber is expressed by the equation:

Thermoplastic resin/Fine carbon fiber = x/(100-x) and a volume resistance of the film is y in Ω cm, a coordinate point (x,y) in a x-y plane is within a range enclosed by a quadrangle with four apices (50,0.01), (50,0.03), (90,0.1) and (90,0.5)

including the lines and the apices.

10 (original): The conductive resin film as claimed in Claim 9, wherein a thickness of the conductive resin film is 10 to 200 μm .

11 (currently amended): A process for manufacturing a conductive resin film as claimed in Claim 9, comprising the steps of applying a liquid composition of a fine carbon fiber having a fiber diameter of 0.001 to 0.5 μ m and a fiber length of 0.1 to 100 μ m and a thermoplastic resin in a solvent to a flat surface of a support, followed by drying or curing to form a coating film; and then peeling the coating film from the support.

12 (original): A conductive resin film manufactured by the process as claimed in Claim 11.

13 (currently amended): The conductive resin film as claimed in any of Claims 9, 10 and 12 used as a collector for an electric double layer capacitor.

14 (original): A collector for an electric double layer capacitor comprising the conductive resin film as claimed in Claim 13.

15 (original): A collector for an electric double layer capacitor consisting of a conductive resin film comprising a thermoplastic resin containing a conductive agent, wherein the film has a volume resistance in a thickness direction of 0.01 to 5 Ω cm and a tensile breaking strength of 10 to 30 MPa as measured in accordance with JIS K7127.

16 (original): The collector for an electric double layer capacitor as claimed in Claim 15, wherein the thermoplastic resin is selected from the group consisting of fluororesins, fluororubbers, polyolefins and polyolefin elastomers.

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17 (currently amended): The collector for an electric double layer capacitor as claimed in Claim 15-or-16, wherein the conductive agent is selected from the group consisting of carbon nanotube, carbon nanofiber, a metal carbide and a metal nitride.

18 (currently amended): The collector for an electric double layer capacitor as claimed in any of Claims 15-to-17, wherein a volume ratio of the thermoplastic resin to the conductive agent is 50/50 to 90/10.

19 (currently amended): The collector for an electric double layer capacitor as claimed in any of Claims 15-to-18, wherein a thickness of the conductive resin film is 0.01 mm to 0.5 mm.

20 (currently amended): The collector for an electric double layer capacitor as claimed in any of Claims 15 to 19, wherein at least one side of the conductive resin film comprises a low-resistance layer.

21 (currently amended): A process for manufacturing a collector for an electric double layer capacitor as claimed in Claim 15, comprising the steps of forming a conductive layer on a peelable support, placing the conductive layer with the support over at least one side of the conductive substrate layer to transfer the conductive layer, and peeling the support to form a low-resistance layer on the surface of the conductive resin film.

22 (original): A collector for an electric double layer capacitor manufactured by the process as claimed in Claim 21.

23 (currently amended): The collector for an electric double layer capacitor as claimed in any of Claims 15 to 20 and 22, wherein the electric double layer capacitor comprises an aqueous electrolytic solution.